

## REMARKS

Claims 34 and 46-64 are pending in the application. Claims 1-33, 35-45, and 65-69 have been cancelled. Claims 46-52, 54, and 58-64 have been amended. The amendments to claims 46-52 and 58-64 are supported by disclosure at page 27, lines 2-15 of the specification. The amendment to claim 54 is supported by the claim as originally filed. The Specification has also been amended to insert the corrected Sequence Listing. No new matter has been added.

### Claim Rejections

#### **35 U.S.C. § 112, first paragraph**

Claims 34 and 46-69 have been rejected under 35 U.S.C. § 112, first paragraph for lack of written description. According to the Examiner, in Paper No. 32 Applicants amended the CRF Sequence Listing to change the C at position 8845 of SEQ ID NO:2 to a G residue. However, the specification teaches that position 8845 of SEQ ID NO:2 should be a C residue.

Applicants have amended the CRF to recite a C at position 8845 of SEQ ID NO:2. Applicants provide herewith a substitute computer readable form copy of the "Sequence Listing", a substitute paper copy of the "Sequence Listing", an amendment directing its entry into the specification, and a statement that the content of the paper and computer readable copies are the same. Thus, this rejection is moot and should be withdrawn.

Claims 46-69 have also been rejected for lack of written description on the grounds that the specification does not appear to provide literal support for limitations added by Applicants in Paper No. 32. According to the Examiner, the specification lacks literal support for "said nucleic acid contains positions 8845-8850 of SEQ ID NO:2" in claims 46-57, and for "nucleic acid which comprises between about 132 and 7000 consecutive nucleotides of SEQ ID NO:2, wherein said nucleic acid contains positions 8714-8845 of SEQ ID NO:2" in claims 58-69.

Claim 46 has been amended to delete the range of positions 8845-8850 of SEQ ID NO:2. Amended claim 46 is directed to an isolated nucleic acid fragment containing the nucleic acid at position 8845 of SEQ ID NO:2. Similarly, claim 58 has been amended to remove recitation of the phrase "wherein said nucleic contains positions 8714-8845 of SEQ ID NO:2". Amended claim 58 depends from claim 46. In addition, claims 46-52 and 58-63 have been amended to

recite nucleic acid fragments of various lengths as described at page 27, lines 11-15. Claims 53-58 and 64 depend either directly or indirectly from claim 46, and as such necessarily incorporate all of the limitations of claim 46. Applicants contend that the specification contains adequate written description for claims 46-64. Claims 65-69 have been cancelled. Thus, Applicants request that this rejection be withdrawn.

### **35 U.S.C. § 102**

Claims 46-51, 53, 58-62, and 65 have been rejected as being anticipated by GenBank Accession No. G10509, published August 15, 1995. According to the Examiner, GenBank Accession No. G10509 teaches a sequence tagged site that is identical to bases 8340-8903 of SEQ ID NO:2.

As discussed above, position 8845 of SEQ ID NO:2 is a C residue, while the corresponding base of GenBank Accession No. G10509 is a G residue. Therefore, GenBank Accession No. G10509 is not identical to SEQ ID NO:2. Therefore, GenBank Accession No. G10509 does not anticipate claims 46-51, 53, and 58-62. Claim 65 has been cancelled. Thus, Applicants request that this rejection be withdrawn.

### **35 U.S.C. § 103**

Claims 46, 54-58, and 66-69 have been rejected as being obvious over GenBank Accession No. G10509 in view of Sambrook *et al.* (1989). According to the Examiner, GenBank Accession No. G10509 teaches a sequence tagged site that is identical to bases 8340-8903 of SEQ ID NO:2. Sambrook *et al.* teach the dideoxy chain termination method of sequencing DNA. As discussed above, GenBank Accession No. G10509 does not teach SEQ ID NO:2. Sambrook *et al.* do not cure this deficiency because teaching one of skill in the art how to determine the sequence of a nucleic acid does not render that sequence obvious. Therefore, claims 46 and 54-58 are not obvious over the combination of GenBank Accession No. G10509 and Sambrook *et al.* Moreover, claims 66-69 have been cancelled. Therefore, Applicants request that this rejection be withdrawn.

**CONCLUSION**

On the basis of the foregoing amendments, Applicants respectfully submit that the pending claims are in condition for allowance, and a Notice of Allowance is respectfully requested. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

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